

U.S. Application No. 08/236,402

Claim 11

Proposed Count

A metal ion-labelled peptide complex comprising:
a) a peptide including

A complex formed by reacting a reagent * * *
with technetium in the presence of a reducing
agent

The method of forming the complex of the '516 patent is disclosed at col. 19, line 6, through col. 20, line 37. The "reducing agent" of the '402 application is Sn(II) in the '516 patent. The "reagent" of the '402 application is the "peptide" of the '516 patent. The "technetium 99m" of the '402 application corresponds to the "metal ion label" of the '516 patent

a biological-function domain

*the reagent comprising a specific binding
compound*

and a metal-ion binding domain;

the compound being covalently linked to a
radiolabel complexing moiety selected from the
group consisting of

and b) a metal ion complexed to the metal ion binding
domain;

* * * technetium 99m * * *

wherein the metal ion-binding domain comprises one or more
amino acids containing a sulfur atom which is available for
binding to metal ions or which can be made available for
binding to metal ions, or comprises 2-mercaptoethylamine or
2-mercaptopropylamine

*formula I wherein Z is selected from the group
consisting of cysteine, homocysteine, isocysteine
and penicillamine * * * and comprises a
carbonyl group covalently linked to a hydroxyl
group, a NR³R⁴ group wherein R³ and R⁴ are
each independently H or lower (C¹-C⁴) alkyl*

Claim 11

Proposed Count

and further includes one or more amino acids each containing at least one nitrogen atom or oxygen atom but not a sulfur atom which is available for binding to metal ions or which can be made available for binding to metal ions;

wherein the biological-function domain is an amino acid sequence having a molecular weight of less than 10,000 daltons

and wherein the peptide further comprises from 0 to about 20 amino acids not included within the metal ion-binding domain or the biological-function domain.

formula 1 wherein (amino acid)¹ and (amino acid)² are each independently any primary α - or β -amino acid that does not contain a thiol group

a specific binding compound having a molecular weight of less than 10,000 daltons